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THE ELEMENTARY SCHOOL TEACHER

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REPEATERS IN THE UPPER GRAMMAR GRADES

EDWARD L. THORNDIKE
Teachers College, Columbia University

The question suggested by our title is important for several reasons, which will be made clear after the facts have been presented.

The facts are as follows: A "repeater" is, for our purpose, defined as a pupil who is reported by school officers (1) as doing the work of the grade for the second time, or (2) as having spent more than a year (or half-year in the case of systems with 14, 16, or 18 grades in the elementary school) in the grade. I have data from ten cities chosen at random as to the number of "repeaters" per hundred pupils enrolled in the case of each of the last three grammar grades (grades 6, 7, and 8 in eight cities; 7, 8, and 9 in one city; 5, 6, and 7 in one city). I have similar data in the case of each of the last two grades (6 and 7) in the eleventh city. For the average of the cities the number of repeaters per hundred pupils enrolled is:

In the second from the last grammar grade.....	14.3
In the next to the last grammar grade.....	12.6
In the last grammar grade.....	12.4

For the median of the cities the number of repeaters per hundred pupils enrolled is:

In the second from the last grammar grade.....	11.4
In the next to the last grammar grade.....	11.8
In the last grammar grade.....	8.1

In view of the nature of the data I should estimate the central tendencies as 12.5, 11.5, and 9 for the three grades in order. Table I gives the facts in detail.

TABLE I
RATIO OF NUMBER OF "REPEATERS" TO TOTAL NUMBER OF PUPILS, FOR EACH OF
THREE GRADES IN ELEVEN CITIES

School	Second from Last Grammar Grade	Next to Last Grammar Grade	Last Grammar Grade
Aurora, Ill.....	.071	.065	.055
Chester, Pa.....	.188	.179	.141
Decatur, Ill.....118	.081
Galesburg, Ill.....	.318	.263	.450
Jamestown, N. Y.....	.096	.119	.088
Kansas City, Mo.....	.224	.212	.127
New York City (a few schools only).....	.148	.157	.073
Quincy, Mass.....	.109	.092	.097
Springfield, Ohio.....	.119	.043	.020
Wheeling, W. Va.....	.052	.057	.037
Williamsport, Pa.....	.102	.077	.075
Median.....	.114	.118	.081
Average.....	.143	.126	.124

The data are for October, 1909, except in the case of five cities. In Jamestown they are for December, 1909; in Galesburg they are for 1898; in Springfield they are for June, 1907 and 1908; in Williamsport they are for June 1907 and 1908; in Kansas City they are for June 1905 and 1907. For the data for 1907 in the last three cities I am indebted to Ayres, *Laggards in American Schools*, p. 74. For the data for Aurora, Chester, Decatur, Jamestown, Quincy, and Wheeling I am indebted to the superintendents of schools in those cities. For the New York data I am indebted to several principals of schools. The Galesburg figures are the proportions of *those promoted* who spent more than a year in the grade.

These facts disprove the opinions expressed or implied by Ayres and others that if a pupil fails of promotion in grades 6, 7, or 8 he is practically sure to be eliminated. On the contrary two-thirds or more of those failing of promotion in grades 6, 7, or 8, seem to continue in the grade. The percentage of pupils failing of promotion is known to be about 15 for grades 6 and 7

and 12½ for grade 8. The percentage of repeaters is, in our eleven cities, about 12.5 for grade 6, 11.5 for grade 7, and 9 for grade 8.

This rough estimate for cities in general can be checked by getting the actual percentage which the proportion remaining over a year is of the proportion failing of promotion in the same grade. I have data permitting the calculation of this percentage, subject to the chance variations of different years, for seven cities. The median results are that seven out of ten students failing of promotion in grade 6 or 7 continue in the grade, and five out of ten in grade 8. On the whole the most likely estimate seems to be that of the non-promoted in grades 6, 7, and 8, respectively, seven-tenths, seven-tenths, and six-tenths became "repeaters." The data are given in Table II. They are

TABLE II

PERCENTAGE WHICH THE PROPORTION REMAINING OVER A YEAR IN THE GRADE
IS OF THE PROPORTION FAILING OF PROMOTION IN THE SAME GRADE
DATA FOR LAST THREE GRADES IN SEVEN CITIES

School	Second from Last Grammar Grade	Next to Last Grammar Grade	Last Grammar Grade
Chester, Pa.	55	66	35
Jamestown, N. Y.	107	85	29
Kansas City, Mo.	80	85	75
New York, N. Y.*	98	98	44
Springfield, Ohio	68	39	45
Williamsport, Pa.	70	77	79
Wheeling, W. Va.	27	26	46
Median.....	70	77	45

* One school only.

inadequate for any one city, not only because the proportion remaining over a year had to be in some cases from a different year than that from whose record the proportion failing of promotion was found, but also because demotions, trial promotions, and the like greatly complicate the records. For example, the number failing of promotion in the first grade is in one city recorded as 50 per cent., or three times the number repeating that grade (.185). Of course there were not really 31.5 per cent. who failed of promotion but did not repeat the grade. This

city reports only 27, 26, and 46 per cent., respectively, of the non-promoted in grades 6, 7, and 8 as repeating the grade, but it reports only 35, 60, 55, 51, and 25 as corresponding percentages for grades 1 to 5. So it would be absurd to conclude that in that city the great majority of those failing in grades 6, 7, or 8 leave school before the next November. If one did he would have to conclude also that half of the pupils failing in grades 1, 2, or 3 left school before the next November!

Though thus inadequate for any one city, the data give a result for the median of the seven cities which, though probably too low and very unreliable, is very much more reliable than any person's guess. It is therefore a very valuable check on the more roundabout result for the eleven cities.

So far then as the facts reported by school officers go, *the pupil who fails of promotion in grades 6, 7, 8 is almost as likely to continue in school as the pupil who is promoted.* Roughly he is, by our records, nine-tenths as likely to do so. For, of all the pupils in grade 6 or grade 7, only four-fifths continue to the next grade; while of all the pupils in the last grammar grade the percentage continuing is probably even lower.

As I have elsewhere stated emphatically, the mass statistics of school reports need to be supplemented by individual educational histories. The facts of elimination, retardation, extra promotions, repetitions of grades, and the like can be measured adequately only by such histories of individuals. And I am fully aware of the complexities, inconsistencies, and ambiguities of school records. But the reports concerning the number of children repeating the last three elementary school grades, even after full allowance is made for possible errors, show three facts beyond a doubt:

First of all, retardation is seen to be an important feature of the late as well as the early grades. It has been shown elsewhere that the percentages of failure of promotion are as great for late as for early grades, with the exception of grade 1. The data reported in this article show that these pupils are not saved from retardation by the worse fate of immediate elimination. As a

matter of fact the same pupil is *more likely* to be retarded in the late grades than in the early.

Secondly, to estimate the number of pupils who continue to any given late grade it is not correct to divide the enrolment of that grade (say grade 6) by the number of pupils beginning should in one year six or so years before. The dividend should be the number of pupils beginning that grade in one year. This will be, on the average, only seven-eighths of the enrolment for grade 6, eight-ninths for grade 7, and nine-tenths or ten-elevenths for grade 8. The estimates made by Ayres of the number of pupils continuing to grade 6 and beyond are thus much too high. The objections which have been made to the estimates in the United States Bureau of Education Bulletin on *The Elimination of Pupils from School* on the ground that failure of promotion and consequent repetition of a grade are far more frequent in grades 2, 3, and 4 than in grades 6 to 11 are shown to be without foundation in fact.

In the third place, the facts show that in so far as failure of promotion is an adequate measure of intellectual dulness, the retention of pupils in grades 6, 7, or 8 is not at all highly selective for intellect. Failure of promotion is, of course, far from a perfect measure of dulness; and nothing like an exact measure of the extent to which the more gifted pupils in grade 6 continue in school to grade 7, the more gifted in grade 7 to grade 8, and so on can be made from present knowledge. But the rate of progress in school is correlated with intellectual gifts to some degree, and the so frequent continuance in school in the last three grammar grades by pupils who fail of promotion is significant. The facts reported here certainly could not exist if the length of a pupil's continuance in school paralleled at all exactly his intellectual ability.

On this important question of the nature of the selection for continuance in school and college we have far too few facts. They are substantially the following: (1) The relative proportions of children of different ages in the different grades through to college graduation show that the children who reach a given grade (after the first two or three) at a late age are likely to

leave school earlier than the others. This can be proved to be the case for age at entrance to grades 3, 4, 5, or 6 and probably holds for grades 7-12, and even for college classes. But in view of the facts reported in this paper slow progress in the last three grades does not seem to have so great an eliminating force as slow progress in earlier grades. (2) Dearborn has found a rather slight relation between continuance to high school and scholarship (as tested by marks) in late grades of the elementary school. (3) Several school officers have reported the opinions of teachers concerning the causes why pupils leave school. By these opinions intellectual inferiority is a real, but by no means an exclusive, cause.

At present we have some rough idea of how many pupils continue to any grade up through high school, how many fail of promotion in that grade, and how many stay in that grade for more than a year. But we know almost nothing about the qualitative questions: What sort of pupils continue to this grade? What sort of pupils fail of promotion in it? What sort of pupils stay to repeat it? The educational life-histories of individual pupils must be studied if these questions are adequately to be answered.